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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/729,867	12/04/2000	Alexander J. Hartmann	042390.P10326	6801

7590

02/04/2005

Michael J. Mallie  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP  
7th Floor  
12400 Wilshire Boulevard  
Los Angeles, CA 90025

EXAMINER

BALI, VIKKRAM

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/729,867

Applicant(s)

HARTMANN ET AL

Examiner

Vikram Bali

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2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12, 14-15, 18, 20-22, 24-25, 27-28, 30-31, 33-34, 37-38, 40-41, 43-46, 48-49, 51-52, 55-56, and 58-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/2/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Continuation of Disposition of Claims: Claims pending in the application are 1-8,10-12,14,15,18,20-22,24,25,27,28,30,31,33,34,37,38,40,41,43-46,48,49,51,52,55,56 and 58-62.

### **DETAILED ACTION**

In response to the amendment filed on 10/25/2004, all the amendments have been entered and the action follows:

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Distinguishing photographs and graphics on the world wide web, by Athitsos, IEEE 1997.

With respect to claim 1, Athitsos discloses a photograph and graphic distinguishing method that train a model using the different values of the images (see page 11, col. 1, lines 2-9, lines 13-19, col. 2, lines 4-8, the photographs and graphics are read as natural and artificial or slide and comic images), the training is done per the color and the amount of noise (see page 11 col. 2 first paragraph) as claimed. Furthermore, Athitsos also discloses the feature vector as the edge feature of the image, (see page 12 section 4 image metrics, and page 11 column 2, last paragraph, wherein the edge contours between the regions are considered as the distinctions in the images) as claimed in the other independent claims.

***Claim Rejections - 35 USC § 103***

4. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Distinguishing photographs and graphics on the world wide web, by Athitsos, IEEE 1997 in view of Zhang et al (US 5491627).

With respect to claim 2, Athitsos discloses the invention substantially as disclose and as describe above in claim 1. However, he fails to disclose generating of noise reduced third image by subtraction of two images, as claimed. Zhang teaches the

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generating of noise reduced third image by subtraction of two images, (see figure 18 and col. 5, lines 9-20) as claimed.

Therefore, it would have been obvious to one ordinary skilled in the art at the time of invention to simply combine the two references as they are analogous because they are solving similar problem of image classification. The teaching of Zhang can be incorporated in to the Athitsos's system of image classification in order to reduce the number of false positive detections while preserving all the true positive detections (see col. 2, lines 28-30 of Zhang).

With respect to claims 3-5 as best understood, the median filter, the gaussian filter and the Wiener filter is well known in order to reduce the noise in the signal.

With respect to claim 6, Zhang further teaches the video stream of data, (the mammograms are video signal) as claimed.

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Claims 7-8, 10-12, 14-15, 18, 20-22, 24-25, 27-28, 30-31, 33-34, 37-38, 40-41, 43-46, 48-49, 51-52, 55-56, and 58-62 are rejected for the same reasons as set forth in the rejection of claims 1-6, because claims 7-8, 10-12, 14-15, 18, 20-22, 24-25, 27-28, 30-31, 33-34, 37-38, 40-41, 43-46, 48-49, 51-52, 55-56, and 58-62 are claims similar subject matter as claimed in claims 1-6.


### ***Response to Arguments***

5. Applicant's arguments filed 10/25/2004 have been fully considered but they are not persuasive. Applicant argues that the references fail to disclose or teach training a classification model from a noise to classify as claimed in independent claims. Examiner disagrees and would like to point out that the limitations are given their broadest reasonable interpretations. The reference of Athitsos, distinguishes photographs and graphics, depending upon the color of the images (see page 11 col. 2 last two paragraphs), these decision trees are train (see page 14 section 5 and 5.1) and the training is done per the color and the amount of noise (see page 11 col. 2 first paragraph) as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is 703.305.4510. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703.308.6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Vikkram Bali  
Primary Examiner  
Art Unit 2623

vb  
February 4, 2005